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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,798	12/30/2003	Pierce Keating	RADIP004	5352
21912	7590	04/19/2005	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			LUU, AN T	
			ART UNIT	PAPER NUMBER
			2816	
DATE MAILED: 04/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

11A

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,798	<b>Applicant(s)</b> KEATING, PIERCE	
	<b>Examiner</b> An T. Luu	<b>Art Unit</b> 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-21 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 6, 12, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the limitation "*a second clock input of the second flip-flop*", line 3, does not have a clear antecedent basis since there is no "*a first clock input of the second flip-flop*" recited previously. Claim 6 has the same problem as that of claim 4 as noted above.

Regarding claim 15, the recitation of claim appears to be incomplete since it does not recite a device and/or component to carry out the limitation "*monitored*".

Regarding claim 12, the limitations “*an oscillating signal buffer*” and “*a primary circuit buffer*” appear representing the same buffer, namely 208. Figure 2 of the instant application does not show a buffer that meets the requirement of “*a primary circuit buffer*”.

Regarding claim 16, the limitation “*the oscillating signal is monitored and the oscillator is restarted if it is determined that the output has ceased to oscillate*” appears to be misdescriptive since figure 2 shows signal STARTUP to initiate the operation of the circuit. And the signal STARTUP operates independently from the circuit.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9, 11 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by the Senturia reference (US Patent 4,236,121).

Senturia discloses in figure 15 an oscillating circuit comprising a first flip-flop 25B1 and a second flip-flop 25B2 coupled with the first flip-flop to provide an oscillating signal 27C’ as required by claim 1.

Regarding claim 2, it is inherent that the oscillating signal has an oscillation frequency close to a maximum toggling frequency of the flip-flop since the frequency of the output of the flip-flop depends on frequency of toggling the flip-flop.

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Regarding claim 3, figure 15 shows the first and second flip-flops are configured in a feedback arrangement.

Regarding claim 4, figure 15 shows the first and the second flip-flops are configured in a feedback arrangement wherein the oscillating signal is fed back to a first clock input of the first flip-flop (i.e., terminal receiving 27A) and a first clock input of the second flip-flop (i.e., terminal receiving 27B').

Regarding claim 5, figure 15 shows wherein the first and the second flip-flops are configured in a cross-coupled feedback arrangement (i.e., terminal receiving 27B coupled to terminal of 27C' and terminal receiving 27A coupled to terminal of 27D' wherein signals at 27C' and 27D' are complimentary signals.

Regarding claim 6, figure 15 shows the first and the second flip-flops are configured in a feedback arrangement wherein the oscillating signal is fed back to a first clock input of the first flip-flop (i.e., terminal receiving 27B) and a first clock input of the second flip-flop (i.e., terminal receiving 27B'), and the oscillating signal has a positive transition (i.e., rising edge) and a negative transition (i.e., falling edge) and clock inputs of the first and the second flip-flops are configured to trigger on opposite transitions of the oscillating signal (i.e., 25B1 triggered by positive output terminal of 25B2 and 25B2 triggered by negative output terminal of 25B1).

Regarding claim 7, the scope of claim 7 is similar to that of claim 6. Therefore, it is rejected for the same reason set forth above. It is noted that "*configured in a cross-coupled feedback arrangement to toggle alternatively*" has the same meaning as that of "*configured to trigger on opposite transitions of the oscillating signal*".

Regarding claim 8, figure 15 shows flip-flops 25B1 and 25B2 substantially identical.

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Regarding claim 9, col. 2, line 29-34, indicates the oscillating applied to a circuit (i.e., MOS logic) and the oscillator resides on the same die as the circuit.

As to claim 11, inverter 20A3 is seen as a clock buffer configured to buffer the oscillating signal.

Regarding claims 13-14, the limitation "*the oscillating signal is sent to*" is seen as functional limitation which is anticipated by the Senturia since the oscillating signal of Senturia is capable of providing to various devices, including but not limited to, FPGA or ASIC.

As to claim 15, inverter 20A3 is seen as a device to monitor the oscillating signal.

6. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by the Nakano reference (US Patent 6,515,549).

Nakano discloses in figure 2 an oscillating circuit comprising a first flip-flop 2 and a second flip-flop 4 coupled with the first flip-flop to provide an oscillating signal OUT as required by claim 1.

Regarding claim 10, figure 2 of Nakano discloses an interface 1 for receiving a start up signal EN configure to start oscillation.

#### ***Allowable Subject Matter***

7. Claims 17-21 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose an apparatus and method there of comprising elements being configured as recited in claims. Specifically, none of the prior art teaches or fairly suggests,

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among other things, the limitations “*providing the oscillating signal as a first clock input to a first flip-flop*” and “*inverting the oscillating signal and provide the inverted oscillating signal as a second clock input to a second flip-flop*” as required by claim 17; “*a third element configured to receive the first data output and the second data output as inputs and provide the oscillating signal as output*” as required by claim 20; and “*using the first data output and the second data output to generate an alternating output that sustains the oscillation of the oscillating signal*” as required by claim 21.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu  
3-29-05 *ATL*



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